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Fact Sheet
Maximum Achievable Control Technology Standards

What are Hazardous Air Pollutants?

Hazardous air pollutants (HAP), also known as toxic air pollutants or air toxics, are those pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. The Clean Air Act requires us to control 188 hazardous air pollutants, which are listed at http://www.epa.gov/ttn/atw/188polls.html. Examples of toxic air pollutants include benzene, which is found in gasoline; perchloroethlyene, which is emitted from some dry cleaning facilities; and methylene chloride, which is used as a solvent and paint stripper by a number of industries.

How do we regulate HAP emissions?

The Act requires us to develop regulations (also known as rules or standards) for all industries that emit one or more of the HAP in significant quantities. We developed a list of categories of industrial sources that must meet technology requirements to control HAP. You'll find this list at http://www.epa.gov/ttn/atw/socatlst/socatpg.html. The rules are called National Emission Standards for Hazardous Air Pollutants (NESHAP) for source categories. They're commonly called Maximum Achievable Control Technology (MACT) standards because they are based on the emission limitation that can be achieved using state-of-the-art emission control technologies and strategies, including pollution prevention.

What MACT standards have we developed?

We have developed, or are developing, MACT standards for each industrial source category that we're required to regulate. You'll find information about the rules for each industrial source category at http://www.epa.gov/ttn/atw/eparules.html. As of October 9, 2001, we have promulgated 50 MACT standards covering 86 different types of major industrial sources, such as chemical plants, oil refineries, aerospace manufacturers, and steel mills, as well as categories of smaller sources, such as dry cleaners, commercial sterilizers, secondary lead smelters, and chromium electroplating facilities. The requirements in many of these regulations take effect between 1996 and 2002. When fully implemented, these standards are projected to reduce annual air toxic emissions by about 1.5 million tons. We have also proposed 21 MACT standards, and expect to propose an additional 24 MACT standards in the next year. Combined, these rules will cover all of the source categories that we're required to regulate.

Who must comply with a MACT standard?

The rules apply to stationary industrial sources of HAP. Each MACT standard specifically defines the industrial source category that is subject to the rule. For example, the Flexible Polyurethane Foam Production MACT covers slabstock, molded, and rebonded polyurethane foam production, while the Flexible Polyurethane Foam Operations MACT covers operations engaged in cutting, gluing, or laminating pieces of flexible polyurethane foam.

Each MACT standard applies to major sources in the industrial source category. Some MACT standards also apply to area sources in the industrial source category. "Major sources" are those that emit 10 tons per year of any of the listed HAP, or 25 tons per year of a mixture of air toxics. These sources may release air toxics from equipment leaks, when materials are transferred from one location to another, or during discharge through emission stacks or vents.

"Area sources" are sources that emit less than 10 tons per year of a single air toxic, or less than 25 tons per year of a combination of air toxics. Although emissions from individual area sources are often relatively small, collectively their emissions can be of concern--particularly where large numbers of sources are located in heavily populated areas.

You'll need to check each rule to find out whether your area sources are covered.

What do the MACT standards require?

Each MACT standard has emission standards or other requirements to limit toxic air pollutant emissions. Each rule also includes monitoring, recordkeeping, and reporting requirements to ensure compliance with the emission standards.

Where can you find more information?

You can find more information about MACT standards on our website at http://www.epa.gov/ttn/atw/eparules.html.